ECONOMIC DEVELOPMENT AND TRANSPORTATION

Economic development and transportation often go hand in hand. Improved transportation networks do not guarantee economic growth, but they can foster it. Conversely, increased economic development in an area can create the need for better transportation services. There is a definite, meaningful connection between economic growth and transportation networks.

Research has found that many indicators of economic health, such as employment and earnings growth rates, are higher in counties served by highways than those that are not. MoDOT compared counties with interstates to those without and found similar results (see Table 1. Comparison of Missouri counties with interstates compared to those without.).

The Missouri Economic Research and Information Center (MERIC) of the Missouri Department of Economic Development (MoDED) is working in conjunction with the Missouri Department of Transportation (MoDOT) to better understand how economic growth and improved highway networks affect one another.

Table 1. Comparison of Missouri counties with interstates compared to those without.

Indicator	76 Counties – w/o Interstates	29 Counties With Interstates	Difference	Percent Difference
Population	19,680	29,229	9,549	49%
Average Wage	$20,480	$22,189	$1,709	8%
Household Income	$29,918	$34,142	$4,224	14%
# Businesses	470	685	215	46%
Gross sales Tax (000)	$3,874	$5,633	$1,759	45%
Real Est. Value (000)	$119,711	$193,686	$73,975	62%

Source: http://modot.missouri.edu/FinalDraft2A.pdf. Averages based on 2003.

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Current Missouri Projects

MERIC is partnering with MoDOT on several projects, such as the Smooth Road Initiative (SRI) and the Statewide Transportation Improvement Plan (STIP), to better understand economic impacts at the state level. The economic analysis includes cumulative economic impact factors such as gross state product and personal income. They also evaluate the average annual economic impacts on employment and personal income.

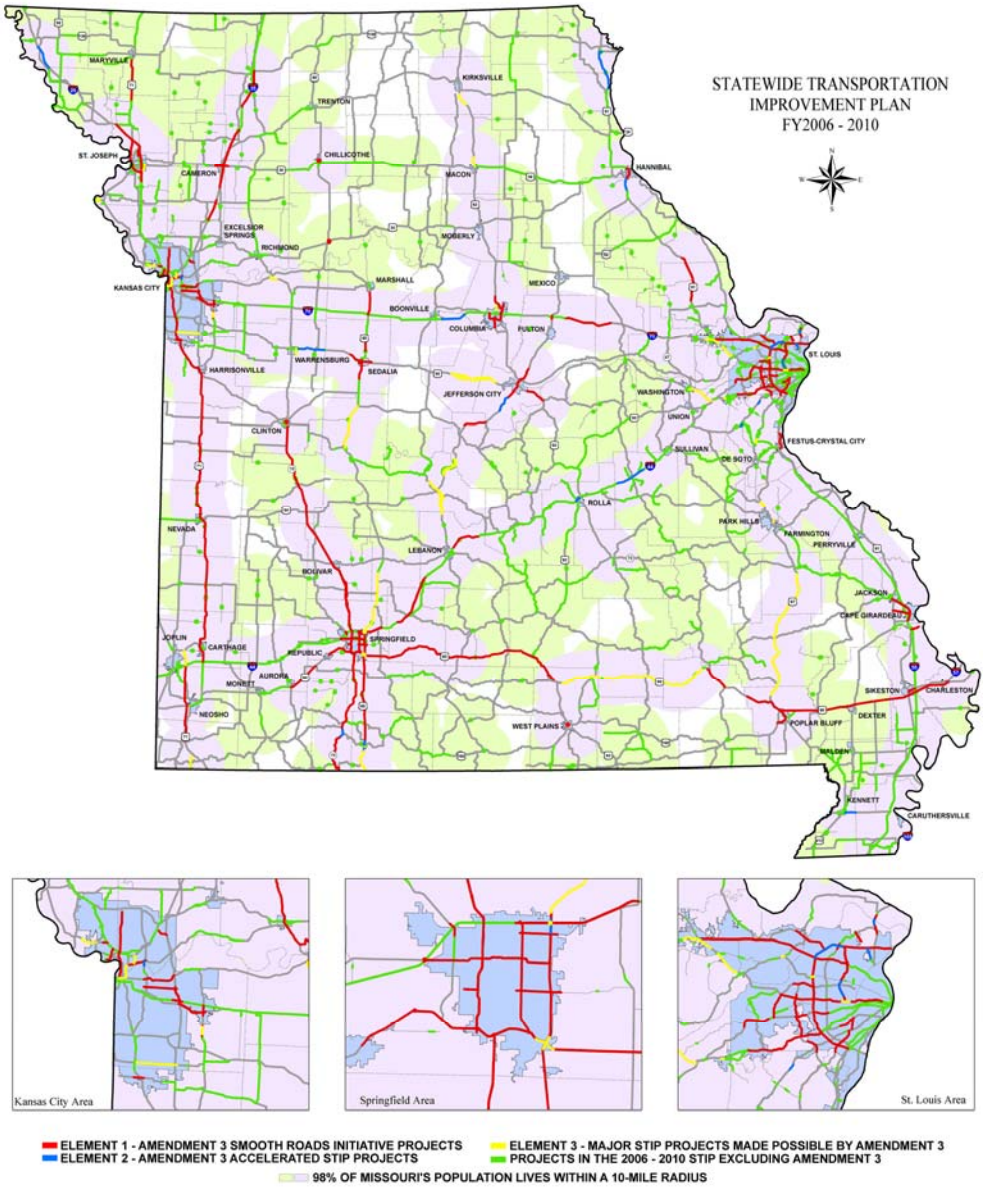

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Table 2. An example of the economic benefits transportation improvements help foster

Missouri's Statewide Transportation Improvement Plan (STIP) invests over $5.7 billion dollars in 800 transportation infrastructure projects across the state between fiscal years 2006-2010.

Over 20 years, every dollar of STIP highway investment in this project returns:

- $0.10 in new net general revenues to the State of Missouri totaling $595.5 million
- $2.63 in new personal income to Missourians totaling $15.1 billion
- $4.89 in new value-added (GSP) to Missouri's economy totaling $28.2 billion
- $8.25 in new economic activity (output) to Missouri's economy totaling $47.5 billion

On average each year , the project creates 20,500 new jobs annually paying an average wage of $29,000 per job, generates $29.8 million in new net general revenues annually, $756.6 million in new personal income annually, $1.4 billion in new value-added to the economy annually, and $2.4 billion annually in new economic activity.

CUMULATIVE ECONOMIC IMPACT ACROSS MISSOURI

	Benefit Ratio	20-Year Total	
CUMULATIVE NET GENERAL REVENUE	0.10 : 1.00	$595.448	million
CUMULATIVE PERSONAL INCOME	2.63 : 1.00	$15,132.552	million
CUMULATIVE VALUE-ADDED / GSP	4.89 : 1.00	$28,195.029	million
CUMULATIVE ECONOMIC OUTPUT	8.25 : 1.00	$47,537.347	million

AVERAGE ANNUAL ECONOMIC IMPACT ACROSS MISSOURI

ANNUAL EMPLOYMENT	20,491	at	$29,385	per job
ANNUAL NET GENERAL REVENUE	$29.772	million		
ANNUAL PERSONAL INCOME	$756.628	million		
ANNUAL VALUE-ADDED / GSP	$1,409.751	million		
ANNUAL ECONOMIC OUTPUT	$2,376.867	million		

It is apparent by looking at the STIP impact analysis that there is a strong correlation between transportation improvements and economic development.

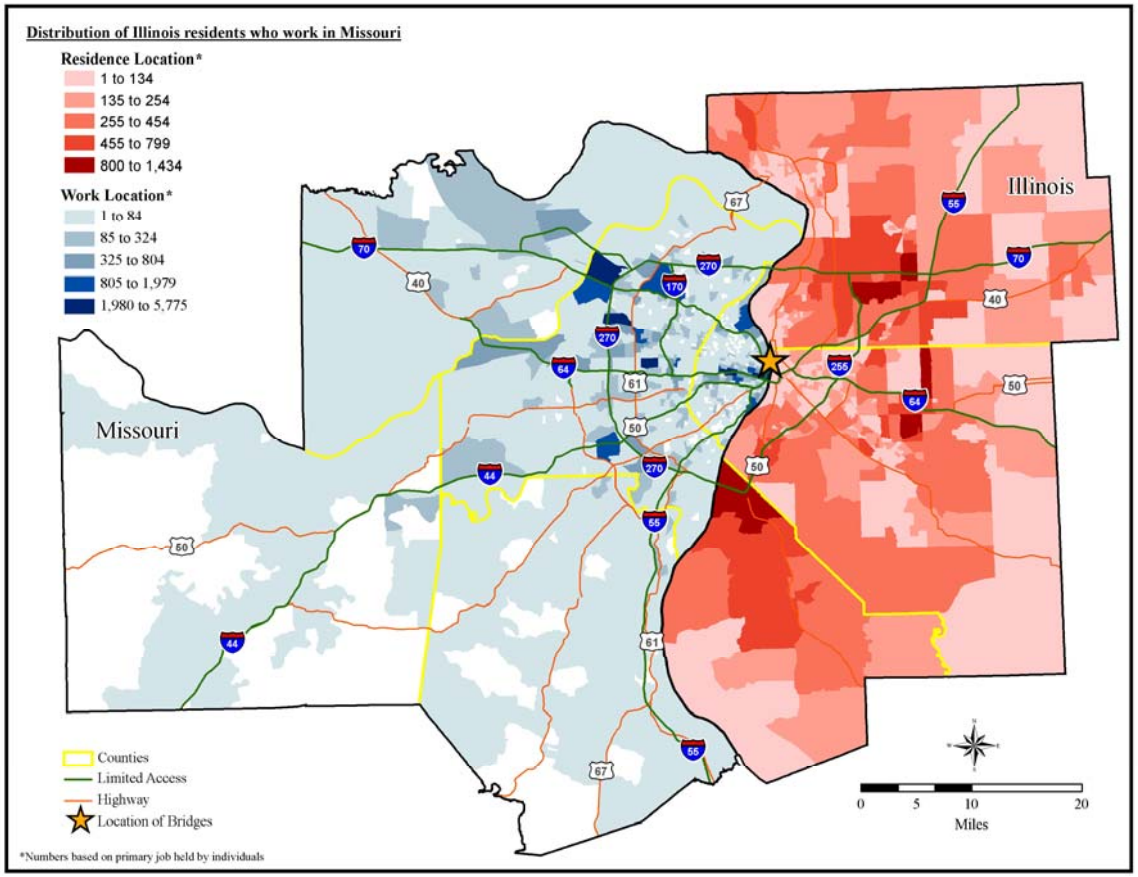
Projects such as these highlight the larger connections between economic prosperity and transportation. MERIC and MoDOT also want to study these connections at the local level. New data and analytical tools are making this possible.

ECONOMIC DEVELOPMENT AND TRANSPORTATION

Innovative Research with Local-Level Data

The use of detailed economic data in transportation analysis can lead to a better understanding of the effects improved transportation systems have on a local area. Upcoming projects benefit from this new economic data and analysis.

One type of economic information now being utilized is the Local Employment Dynamics (LED) data. LED can show where individuals live and where those same individuals work. In other words, it would be possible to determine logical transportation routes based on residence and work locations. In this map example, LED data is used within a Geographic Information System (GIS) to illustrate the approximate number and location of people who cross the river from the Illinois side to the Missouri side for work in St. Louis.



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Innovative Research with Local-Level Data Continued

The recent development of detailed business location data coupled with advanced GIS analysis are also giving MERIC and MoDOT new methods for studying local transportation impacts.

In rural settings, for example, highway improvements may spur nearby, localized development that may be missed when analyzing county-level industrial data (see Henry County map).

Although these new economic data sets are still evolving, MERIC and MoDOT are helping lead the way in this innovative research. In years to come this new economic data will help show the impact that improved transportation systems have on local economic growth.

Over the years the strong correlation between economic growth and transportation improvements has become more apparent. It is because of this close connection that the continued collaboration of projects between MERIC and MoDOT is so important.